

DEPARTMENT of ENVIRONMENTAL SERVICES
Water Division - Watershed Management Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: MILL POND	Lake Area (ha): 5.22
Town: WALPOLE	Maximum depth (m): 1.5
County: Cheshire	Mean depth (m): 0.9
River Basin: Connecticut	Volume (m ³): 44500
Latitude: 43°05'32" N	Relative depth: 0.6
Longitude: 72°25'41" W	Shore configuration: 1.05
Elevation (ft): 250	Areal water load (m/yr): 33.10
Shore length (m): 850	Flushing rate (yr ⁻¹): 38.80
Watershed area (ha): 358.7	P retention coeff.: 0.42
% watershed ponded: 1.5	Lake type: artificial

BIOLOGICAL:

		14 January 2003	29 July 2002
DOM. PHYTOPLANKTON (% TOTAL)	#1	NO WINTER	COELOSPHAERIUM 40%
	#2	PLANKTON COLLECTED	EUDORINA 15%
	#3		TINY PENNATE DIATOM 9%
PHYTOPLANKTON ABUNDANCE (units/mL)			
CHLOROPHYLL-A (µg/L)			22.51
DOM. ZOOPLANKTON (% TOTAL)	#1		POLYARTHRA 55%
	#2		NAUPLIUS LARVA 20%
	#3		CONOCHILUS 15%
ROTIFERS/LITER			
MICROCRUSTACEA/LITER			
ZOOPLANKTON ABUNDANCE (#/L)			
VASCULAR PLANT ABUNDANCE			Abundant
SECCHI DISK TRANSPARENCY (m)			1.0
BOTTOM DISSOLVED OXYGEN (mg/L)		8.3	7.9
BACTERIA (E. coli, #/100 ml)	#1		11
	#2		2
	#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None
Hypolimnion volume (m³) : None
Anoxic volume (m³) : None

CHEMICAL:

Lake: MILL POND

Town: WALPOLE

	14 January 2003		29 July 2002		
DEPTH (m)	1.0		1.0		
pH (units)	6.4		6.9		
A.N.C. (Alkalinity)	19.1		32.3		
NITRATE NITROGEN	0.44		< 0.05		
TOTAL KJELDAHL NITROGEN			1.00		
TOTAL PHOSPHORUS	0.012		0.055		
CONDUCTIVITY (μ mhos/cm)	114.5		137.3		
APPARENT COLOR (cpu)	34		100		
MAGNESIUM			2.61		
CALCIUM			12.1		
SODIUM			8.8		
POTASSIUM			1.05		
CHLORIDE	12		16		
SULFATE	10		4		
TN : TP			18		
CALCITE SATURATION INDEX			1.8		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 2002

D.O.	S.D.	PLANT	CHL	TOTAL	CLASS
**	5	5	4	14	Eutro.

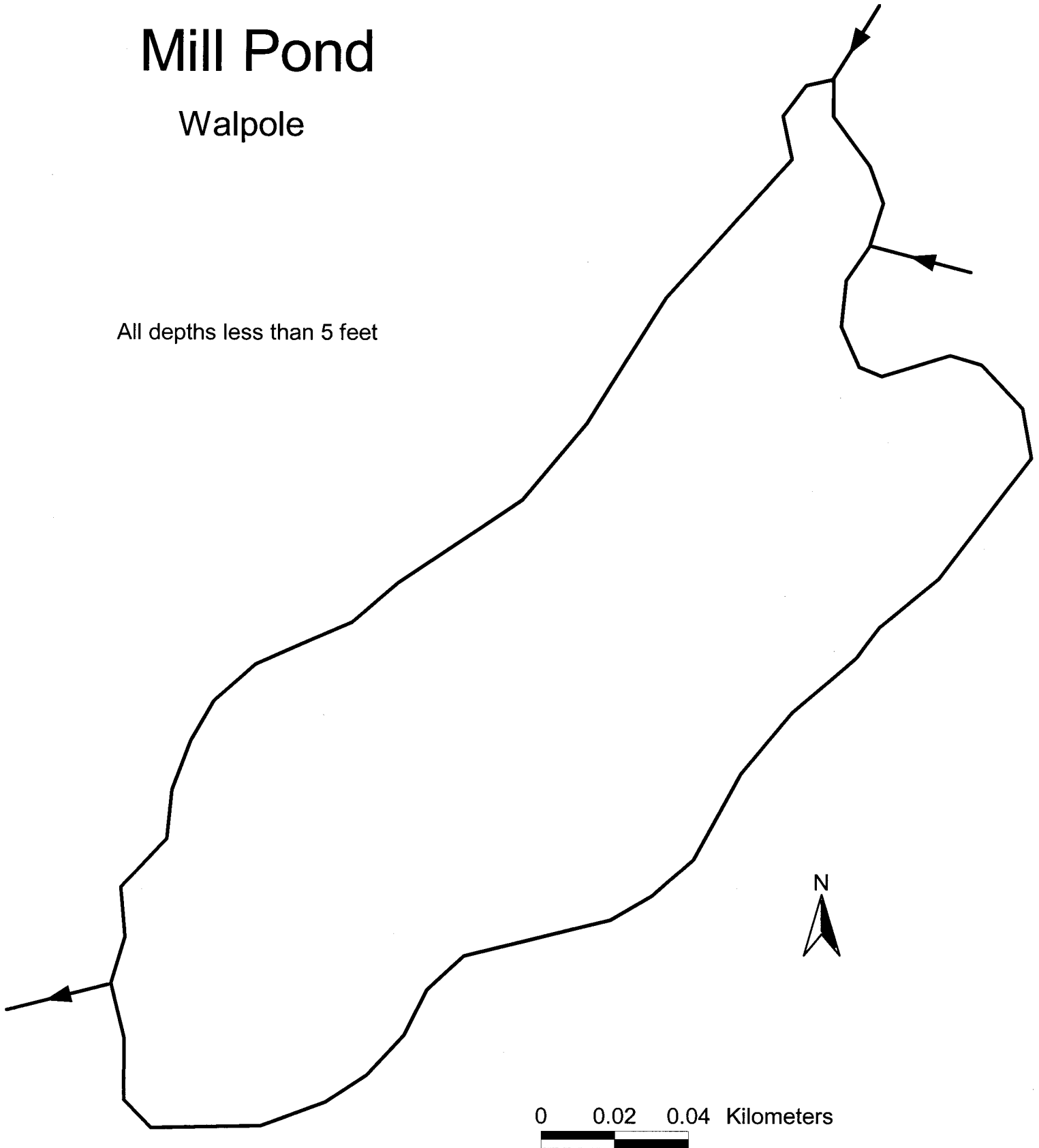
COMMENTS:

1. aka Sawmill Pond.
2. This is a wildlife/nature preserve with trails and parking at the outlet. No boat launch area but a canoe can be put in near the dam.
3. This is a shallow (all depths less than 5 feet), dark tea-colored but not acidic, nutrient-enriched eutrophic pond with abundant plant growth.
4. Somewhat elevated conductivity, chloride and cation levels suggest some road salt and other urban runoff.
5. Summer phytoplankton was dominated by a blue-green alga.

Mill Pond

Walpole

All depths less than 5 feet



[illegible]

TOWN: WALPOLE
WEATHER: Hot & humid

[illegible]

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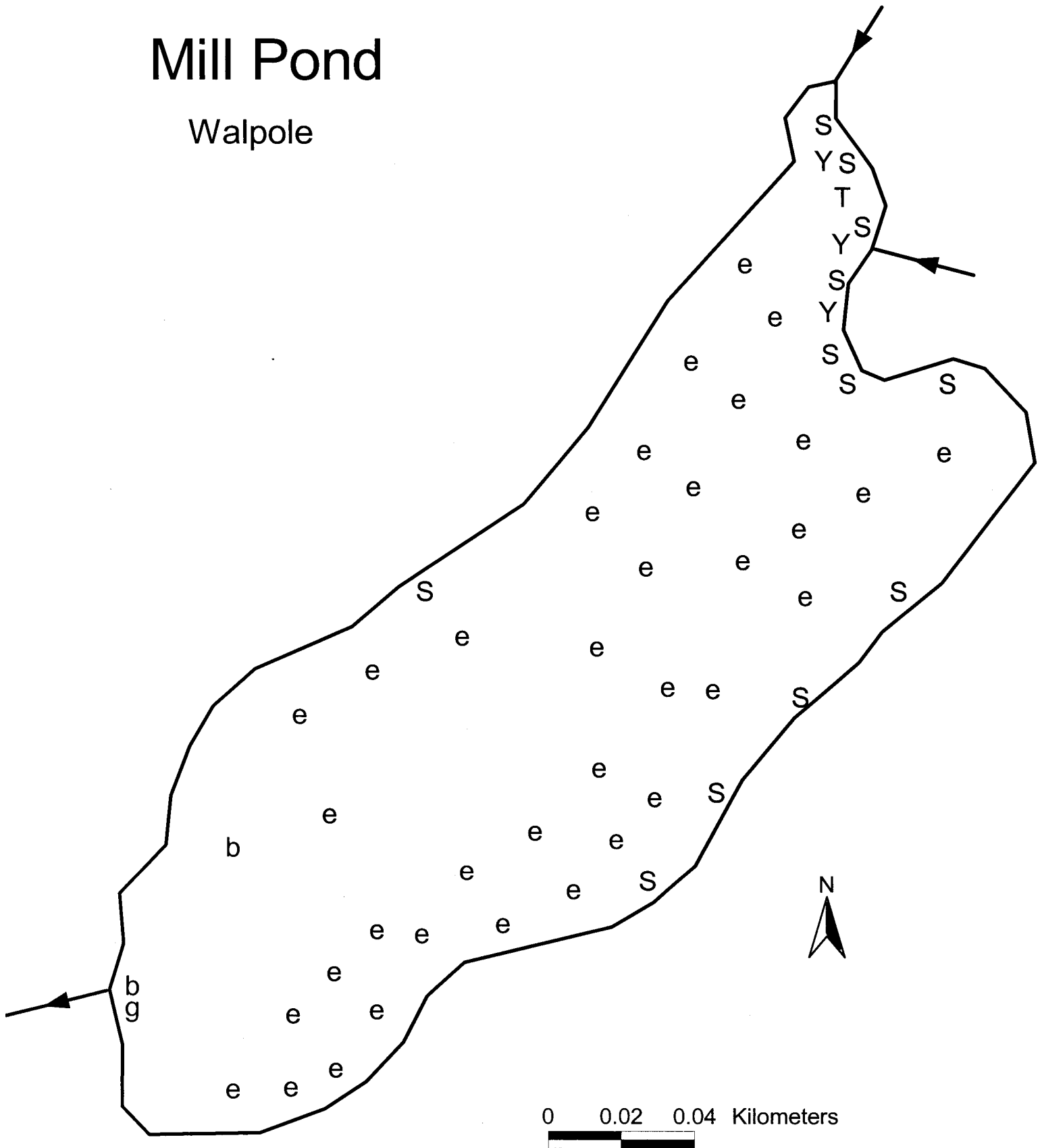
SECCHI DISK (m):    1.0           COMMENTS:
BOTTOM DEPTH (m):   1.5
TIME: 1135

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*Dissolved oxygen values are in mg/L

Mill Pond

Walpole



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